

**To:** Spatz, Dana[Spatz.Dana@epa.gov]; Hetrick, James[Hetrick.James@epa.gov]  
**From:** Bohaty, Rochelle  
**Sent:** Fri 5/26/2017 5:16:02 PM  
**Subject:** FW: PREP Follow-up  
WSDA PREP 2017Presentation.pptx

Dana, Jim,

Please see Matt's email below. I will work with him on getting a meeting time set up for his presentation next Thursday June 1. If you have any questions you would like me to send to him beforehand let me know.

Rochelle F. H. Bohaty, PhD

Senior Chemist

Environmental Risk Branch III

Environmental Fate & Effects Division

Office of Pesticide Programs

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**From:** Bischof, Matthew (AGR) [mailto:MBischof@agr.wa.gov]  
**Sent:** Wednesday, May 24, 2017 3:43 PM  
**To:** Bohaty, Rochelle <Bohaty.Rochelle@epa.gov>  
**Subject:** RE: PREP Follow-up

Hi Rochelle,

I've attached my PREP presentation. I would be happy to present it to your group. I could present the PREP powerpoint tomorrow, May 24<sup>th</sup> any time between 9am-4pm ET, Thursday June 1 any time between 8am-1pm ET, and June 7th any time between 10:30am-4pm ET. I'm in the field 2 days/week, and I normally work 4 ten hour days/week, with field days sometime being longer. Field days are typically Monday and Tuesday. If the days/times I listed do not

work for your group, I can try to find someone to sample in my place during a day that would work.

I am the WSDA lead for the surface water monitoring program for pesticides. My background is in aquatic ecology. I lead the effort in selecting new sites, creating the yearly sampling schedule, and assuring field sampling protocols are followed in eastern and western WA. I am also involved with data analysis and report writing. We have two talented toxicologists (Abigail Nickelson & George Tuttle) that communicate with the lab but I am also involved with organizing some of those details as well. I am one of the two main surface water samplers in Eastern Washington, so my office time is somewhat limited during the field season.

Currently I am also leading an effort to assess WSDA's surface water monitoring program. Gary Bahr who was with the Idaho Dept. of Agriculture has now been with WSDA for about 1.5 years, and is the supervisor for my section (Natural Resources Assessment Section). He instigated the assessment and appointed me as the lead. In the past our monitoring program did not change very much. We were mostly visiting the same sites every year. The long-term data is still very important, but in the past there were probably sites monitored longer than they should have been due to lack of detections. We are wanting to develop a program that responds to what we see in the water which brought about the idea of a Tiered system. If we detect pesticide concentrations at levels of concern we respond by moving the site up a tier. If we do not detect issues then we drop the site and move onto a different watershed to sample.

We also want to utilize our very detailed land use data, somewhat limited pesticide use data, weather, watershed characteristics and salmonid supporting stream information and incorporate it into a standard operating procedure for site selection. This will provide us a standardized way to identify vulnerable watershed to pesticide contamination.

This assessment has also caused us to look at how we can improve our data, and it's value to EPA. As you know, it was litigations against the services for lack of consultation on whether pesticides posed a threat to 26 federally listed endangered and threatened Pacific salmon and steelhead that resulted in the creation of the surface water monitoring program in Washington. It seems like it only makes sense to figure out how we can improve the value of our data to the services. That is also the main reason we have been working to collect continuous flow data out our sampling sites beginning in 2016. The effort of collecting continuous data is not an easy effort, and involves manual labor and some engineering to ensure the pressure transducer and structure holds up well during periodically high flows. The effort involved is one of the reasons we are interested in knowing exactly how the flow data is used in your interpretation of the pesticide concentration data. After your multiple presentations and having conversations with

you I feel like I have a pretty good idea of how that information is used. Having continuous flow data also interests me because of its utility in SEAWAVE.

Using SEAWAVE also interests me due to the fact that we have some long-term data, with some currently sampled sites being sampled as far back as 2003. I also see value in being able to statistically identify pesticide trends for the purpose of reaching out to growers and other state agencies or groups, as well as the POINTS submission process. This last winter when I was able to find some free time I tried teaching myself SEAWAVE. I was able to calculate flow anomalies but I was unable to link that with the pesticide concentration data for some reason. The tough thing about program R is the issue could have been one small detail that I just couldn't find.

Hopefully I've provided you with enough information. Please let me know if you have any further questions.

Thank you,

Matt

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Matthew Bischof

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**From:** Bohaty, Rochelle [<mailto:Bohaty.Rochelle@epa.gov>]  
**Sent:** Tuesday, May 23, 2017 11:28 AM  
**To:** Bischof, Matthew (AGR) <[MBischof@agr.wa.gov](mailto:MBischof@agr.wa.gov)>  
**Subject:** PREP Follow-up

Hi,

I don't want to ambush you on your first day back in the office after PREP but I wanted to reach out to you and follow up on our discussion on your monitoring program/data and SEAWAVE. As I mentioned, there is a group of us in OPP/EFED that are looking to utilize SEAWAVE to help us interpret water monitoring data. I am hopefully that we can find a way to work with you (and others as appropriate) at WSDA. I need to develop a proposal, etc. to present to our management to get buy in. I assume you would need to do the same. Would you mind sharing the presentation that you gave at PREP with me as well as provide me with a summary of "what you do" and "interests" (for example in SEAWAVE). I think it would be helpful if you don't mind giving the group of us working on this project the PREP presentation by webinar. If you are up for it, let me know a few dates/times that work for you and I will get something set up. I also shared your business card and the presentation you gave at ACS with the group.

While there are a few folks in EFED who have actually ran SEAWAVE there are others including myself who have not. We have a scheduled training session on June 8. It is a very informal training basically the folks who have ran the tool are going to show the rest of us how to do it and be there to answer questions. I thinking if I can get a proposal together and you are able to give a presentation to the larger group before that time we could have you join us via the web for the training.

Let me know your thoughts. I hope you enjoyed PREP.

Respectfully,

Rochelle F. H. Bohaty, PhD

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